#5

ENTERED

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        RAW SEQUENCE LISTING            DATE: 12/06/2001
        PATENT APPLICATION:  US/09/834,792    TIME: 15:11:32

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        Output Set: N:\CRF3\12062001\I834792.raw


   4 <110> APPLICANT: Mount Sinai School of Medicine of NYU
   6 <120> TITLE OF INVENTION: TRP8, A TRANSIENT RECEPTOR POTENTIAL
   7       CHANNEL EXPRESSED IN TASTE RECEPTOR CELL
  10 <130> FILE REFERENCE: AP32911 070165.0589
  12 <140> CURRENT APPLICATION NUMBER: 09/834,792
  13 <141> CURRENT FILING DATE: 2001-04-13
  15 <150> PRIOR APPLICATION NUMBER: 60/197,491
  16 <151> PRIOR FILING DATE: 2000-04-17
  18 <160> NUMBER OF SEQ ID NOS: 5
  20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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  24 <212> TYPE: DNA
  25 <213> ORGANISM: Murine TRP8 cDNA
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  30 ggagagatca acttcggagg gtctgggaag aagcgaggca gtttgtgaa ggtgccaagc 180
  31 agtgtggccc cctctgtgct ttttgaactc ctgctcaccg agtggcacct gccagccccc 240
  32 aacctggtgg tgtccctggt gggtgaggaa cgacctttgg ctatgaagtc gtggcttcgg 300
  33 gatgtcctgc gcaaggggct ggtgaaagca gctcagagca caggtgcctg gatcctgacc 360
  34 agtgccctcc acgtgggcct ggcccgccat gttggacaag ctgtacgtga tcactctctg 420
  35 gctagcacat ccaccaagat ccgtgtagtg gccatcggaa tggcctctct ggatcgaatc 480
  36 cttcaccgtc aacttctaga tggtgtccac caaaaggagg atactcccat ccactaccca 540
  37 gcagatgagg gcaacattca gggacccctc tgccccctgg acagcaatct ctcccacttc 600
  38 atccttgtgg agtcaggcgc ccttgggagt gggaacgacg ggctgacaga gctgcagctg 660
  39 agcctggaga agcacatctc tcagcagagg acaggttatg ggggcaccag ctgcatccag 720
  40 atacctgtcc tttgcctgtt ggtcaatggt gaccccaaca ccctagagag gatttccagg 780
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  42 ctcgctgccc tggtgagcca gcctcatctc ctggtgcccc aggtggctga gaagcagttc 900
  43 agagagaaat tccccagcga gtgtttctct gggaagcca ttgtacactg gacagagctg 960
  44 ttacagaaca ttgctgcaca ccccaccctg ctcacagtat atgacttcga gcaggagggt 1020
  45 tcggaggacc tggacactgt catcctcaag gcacttgtga aagcctgcaa gagccacagc 1080
  46 caagaagccc aagactacct agatgagctc aagttagcag tggcctggga tcgcgtggac 1140
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  56 gctgctctgg ctgcctgcaa gatcataaag gaaatgtccc acctggagaa agaggcagag 1740
  57 gtggcccgca ccatgcgtga ggccaagtat gagcagctgg ccctggatct tttctcagag 1800
  58 tgctacggca acagtgagga ccgtgccttt gccctgctgg tgcgaaggaa ccacagctgg 1860
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/834,792

DATE: 12/06/2001
TIME: 15:11:32

Input Set : A:\Figs1-5.txt
Output Set: N:\CRF3\12062001\I834792.raw

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61  atcctacggc ttctgggtgc cttcacctgc ccagccctca tctacacaaa cctcatctcc 2040
62  ttcagtgagg atgccccgca gaggatggac ctagaagatc tgcaggagcc agacagcttg 2100
63  gatatggaaa agagcttcct atgcagccgg ggtggccaat tggagaagct aacagaggca 2160
64  ccaagggctc caggcgatct aggcccacaa gctgccttcc tgctcacacg gtggaggaag 2220
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68  ttcttcacag atgaggacac gcacctggtg aagaaattca ctctgtatgt ggaagacaac 2460
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70  gtgccctcgg tgtttgaggc tggcaggacc gttctggcca ttgacttcat ggtgttcaca 2580
71  cttcggctca tccacatctt tgctattcac aagcagttgg gtcctaagat catcattgta 2640
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73  tatggtgtga ccactcaggc cctgctgcat ccccatgatg gccgtttgga gtggatttc 2760
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80  gtcttcagga aggaagccca gcataagcga caacatctgg agagagactt gcctgacccc 3180
81  ttggaccaga agatcattac ctgggaaacg gttcaaaagg agaacttcct gagtaccatg 3240
82  gagaaacgga ggagggacag cgaggggggag gtgctgagga aaacggcaca cagagtggac 3300
83  ttgattgcca aatacatcgg ggggctgaga gagcaagaaa agaggatcaa gtgtctggaa 3360
84  tcacaggcca actactgtat gctcctcttg tcctctatga cggatacact ggctccagga 3420
85  ggcacctact caagctctca gaactgtggt tgcaggagtc agccagcctc tgctagagac 3480
86  agggagtacc tagagtctgg cttgccaccc tctgacacct gaaatggaga aaccacttgc 3540
87  tctagagccc cagacctggc cacatcgagt ttttggggca catcaacctt cccccactcc 3600
88  cagcagcccc aagaaatggt cttcaaggcc ttgctacaga tcacttcttg gacatccctt 3660
89  cctaagagaa tgaaactcat gtctttggca tctattcggg agcctcagaa gtatcctctc 3720
90  cagcagggca agatttttca tgtcccacta aagctttcac tggcttggac tggacagctg 3780
91  gatctggcca agtcctacat aggacaccat ctgcctggat ggggctattt aggtctaacc 3840
92  cctgtcttac cctgagttcc taagaagcca acctcttaaa cactaggttt ctttctgacc 3900
93  cctgacccac tcattagctg accagctcct agaggcagg actcagatct attgtaatta 3960
94  cctcccatct ttcacccccc acagcattat ctgtctgatc attctggcag aaaccccaag 4020
95  atattgctca agggtaccca atgctacttt actttctata aagcctgtag accacctcaa 4080
96  aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 4140
97  aaaaaaaaaa aaaaaaa                                              4157
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102 <211> LENGTH: 1158
103 <212> TYPE: PRT
104 <213> ORGANISM: Murine TRP8
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108  1               5                  10                  15
109 Asp Gly Trp Glu Pro Ile Leu Cys Arg Gly Glu Ile Asn Phe Gly Gly
110             20                  25                  30
111 Ser Gly Lys Lys Arg Gly Lys Phe Val Lys Val Pro Ser Ser Val Ala
112         35                  40                  45
```

RAW SEQUENCE LISTING   DATE: 12/06/2001
PATENT APPLICATION: US/09/834,792   TIME: 15:11:32

Input Set : A:\Figs1-5.txt
Output Set: N:\CRF3\12062001\I834792.raw

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113 Pro Ser Val Leu Phe Glu Leu Leu Leu Thr Glu Trp His Leu Pro Ala
114     50              55              60
115 Pro Asn Leu Val Val Ser Leu Val Gly Glu Glu Arg Pro Leu Ala Met
116 65              70              75              80
117 Lys Ser Trp Leu Arg Asp Val Leu Arg Lys Gly Leu Val Lys Ala Ala
118             85              90              95
119 Gln Ser Thr Gly Ala Trp Ile Leu Thr Ser Ala Leu His Val Gly Leu
120             100             105             110
121 Ala Arg His Val Gly Gln Ala Val Arg Asp His Ser Leu Ala Ser Thr
122         115             120             125
123 Ser Thr Lys Ile Arg Val Val Ala Ile Gly Met Ala Ser Leu Asp Arg
124     130             135             140
125 Ile Leu His Arg Gln Leu Leu Asp Gly Val His Gln Lys Glu Asp Thr
126 145             150             155             160
127 Pro Ile His Tyr Pro Ala Asp Glu Gly Asn Ile Gln Gly Pro Leu Cys
128             165             170             175
129 Pro Leu Asp Ser Asn Leu Ser His Phe Ile Leu Val Glu Ser Gly Ala
130             180             185             190
131 Leu Gly Ser Gly Asn Asp Gly Leu Thr Glu Leu Gln Leu Ser Leu Glu
132     195             200             205
133 Lys His Ile Ser Gln Gln Arg Thr Gly Tyr Gly Gly Thr Ser Cys Ile
134     210             215             220
135 Gln Ile Pro Val Leu Cys Leu Leu Val Asn Gly Asp Pro Asn Thr Leu
136 225             230             235             240
137 Glu Arg Ile Ser Arg Ala Val Glu Gln Ala Ala Pro Trp Leu Ile Leu
138             245             250             255
139 Ala Gly Ser Gly Gly Ile Ala Asp Val Leu Ala Ala Leu Val Ser Gln
140             260             265             270
141 Pro His Leu Leu Val Pro Gln Val Ala Glu Lys Gln Phe Arg Glu Lys
142         275             280             285
143 Phe Pro Ser Glu Cys Phe Ser Trp Glu Ala Ile Val His Trp Thr Glu
144     290             295             300
145 Leu Leu Gln Asn Ile Ala Ala His Pro His Leu Leu Thr Val Tyr Asp
146 305             310             315             320
147 Phe Glu Gln Glu Gly Ser Glu Asp Leu Asp Thr Val Ile Leu Lys Ala
148             325             330             335
149 Leu Val Lys Ala Cys Lys Ser His Ser Gln Glu Ala Gln Asp Tyr Leu
150             340             345             350
151 Asp Glu Leu Lys Leu Ala Val Ala Trp Asp Arg Val Asp Ile Ala Lys
152         355             360             365
153 Ser Glu Ile Phe Asn Gly Asp Val Glu Trp Lys Ser Cys Asp Leu Glu
154     370             375             380
155 Glu Val Met Thr Asp Ala Leu Val Ser Asn Lys Pro Asp Phe Val Arg
156 385             390             395             400
157 Leu Phe Val Asp Ser Gly Ala Asp Met Ala Glu Phe Leu Thr Tyr Gly
158             405             410             415
159 Arg Leu Gln Gln Leu Tyr His Ser Val Ser Pro Lys Ser Leu Leu Phe
160             420             425             430
161 Glu Leu Leu Gln Arg Lys His Glu Glu Gly Arg Leu Thr Leu Ala Gly
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RAW SEQUENCE LISTING   DATE: 12/06/2001
PATENT APPLICATION: US/09/834,792   TIME: 15:11:32

Input Set : A:\Figs1-5.txt
Output Set: N:\CRF3\12062001\I834792.raw

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162         435                     440                     445
163 Leu Gly Ala Gln Gln Ala Arg Glu Leu Pro Ile Gly Leu Pro Ala Phe
164     450                     455                 460
165 Ser Leu His Glu Val Ser Arg Val Leu Lys Asp Phe Leu His Asp Ala
166 465                     470                 475                 480
167 Cys Arg Gly Phe Tyr Gln Asp Gly Arg Arg Met Glu Glu Arg Gly Pro
168             485                     490                 495
169 Pro Lys Arg Pro Ala Gly Gln Lys Trp Leu Pro Asp Leu Ser Arg Lys
170         500                     505                 510
171 Ser Glu Asp Pro Trp Arg Asp Leu Phe Leu Trp Ala Val Leu Gln Asn
172         515                     520                 525
173 Arg Tyr Glu Met Ala Thr Tyr Phe Trp Ala Met Gly Arg Glu Gly Val
174     530                     535                 540
175 Ala Ala Ala Leu Ala Ala Cys Lys Ile Ile Lys Glu Met Ser His Leu
176 545                     550                 555                 560
177 Glu Lys Glu Ala Glu Val Ala Arg Thr Met Arg Glu Ala Lys Tyr Glu
178             565                     570                 575
179 Gln Leu Ala Leu Asp Leu Phe Ser Glu Cys Tyr Gly Asn Ser Glu Asp
180         580                     585                 590
181 Arg Ala Phe Ala Leu Leu Val Arg Arg Asn His Ser Trp Ser Arg Thr
182         595                     600                 605
183 Thr Cys Leu His Leu Ala Thr Glu Ala Asp Ala Lys Ala Phe Phe Ala
184     610                     615                 620
185 His Asp Gly Val Gln Ala Phe Leu Thr Lys Ile Trp Trp Gly Asp Met
186 625                     630                 635                 640
187 Ala Thr Gly Thr Pro Ile Leu Arg Leu Leu Gly Ala Phe Thr Cys Pro
188             645                     650                 655
189 Ala Leu Ile Tyr Thr Asn Leu Ile Ser Phe Ser Glu Asp Ala Pro Gln
190         660                     665                 670
191 Arg Met Asp Leu Glu Asp Leu Gln Glu Pro Asp Ser Leu Asp Met Glu
192         675                     680                 685
193 Lys Ser Phe Leu Cys Ser Arg Gly Gly Gln Leu Glu Lys Leu Thr Glu
194     690                     695                 700
195 Ala Pro Arg Ala Pro Gly Asp Leu Gly Pro Gln Ala Ala Phe Leu Leu
196 705                     710                 715                 720
197 Thr Arg Trp Arg Lys Phe Trp Gly Ala Pro Val Thr Val Phe Leu Gly
198             725                     730                 735
199 Asn Val Val Met Tyr Phe Ala Phe Leu Phe Leu Phe Thr Tyr Val Leu
200         740                     745                 750
201 Leu Val Asp Phe Arg Pro Pro Gln Gly Pro Ser Gly Ser Glu Val
202         755                     760                 765
203 Thr Leu Tyr Phe Trp Val Phe Thr Leu Val Leu Glu Glu Ile Arg Gln
204.    770                     775                 780
205 Gly Phe Phe Thr Asp Glu Asp Thr His Leu Val Lys Lys Phe Thr Leu
206 785                     790                 795                 800
207 Tyr Val Glu Asp Asn Trp Asn Lys Cys Asp Met Val Ala Ile Phe Leu
208             805                     810                 815
209 Phe Ile Val Gly Val Thr Cys Arg Met Val Pro Ser Val Phe Glu Ala
210         820                     825                 830
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```
211 Gly Arg Thr Val Leu Ala Ile Asp Phe Met Val Phe Thr Leu Arg Leu
212         835             840             845
213 Ile His Ile Phe Ala Ile His Lys Gln Leu Gly Pro Lys Ile Ile Ile
214     850             855             860
215 Val Glu Arg Met Met Lys Asp Val Phe Phe Phe Leu Phe Phe Leu Ser
216 865             870             875                 880
217 Val Trp Leu Val Ala Tyr Gly Val Thr Thr Gln Ala Leu Leu His Pro
218             885             890                 895
219 His Asp Gly Arg Leu Glu Trp Ile Phe Arg Arg Val Leu Tyr Arg Pro
220         900             905             910
221 Tyr Leu Gln Ile Phe Gly Gln Ile Pro Leu Asp Glu Ile Asp Glu Ala
222     915             920             925
223 Arg Val Asn Cys Ser Leu His Pro Leu Leu Leu Glu Ser Ser Ala Ser
224     930             935             940
225 Cys Pro Asn Leu Tyr Ala Asn Trp Leu Val Ile Leu Leu Leu Val Thr
226 945             950             955                 960
227 Phe Leu Leu Val Thr Asn Val Leu Leu Met Asn Leu Leu Ile Ala Met
228             965             970             975
229 Phe Ser Tyr Thr Phe Gln Val Val Gln Gly Asn Ala Asp Met Phe Trp
230         980             985             990
231 Lys Phe Gln Arg Tyr His Leu Ile Val Glu Tyr His Gly Arg Pro Ala
232         995             1000            1005
233 Leu Ala Pro Pro Phe Ile Leu Leu Ser His Leu Ser Leu Val Leu Lys
234     1010            1015            1020
235 Gln Val Phe Arg Lys Glu Ala Gln His Lys Arg Gln His Leu Glu Arg
236 1025            1030            1035                1040
237 Asp Leu Pro Asp Pro Leu Asp Gln Lys Ile Ile Thr Trp Glu Thr Val
238             1045            1050            1055
239 Gln Lys Glu Asn Phe Leu Ser Thr Met Glu Lys Arg Arg Arg Asp Ser
240         1060            1065            1070
241 Glu Gly Glu Val Leu Arg Lys Thr Ala His Arg Val Asp Leu Ile Ala
242         1075            1080            1085
243 Lys Tyr Ile Gly Gly Leu Arg Glu Gln Glu Lys Arg Ile Lys Cys Leu
244     1090            1095            1100
245 Glu Ser Gln Ala Asn Tyr Cys Met Leu Leu Leu Ser Ser Met Thr Asp
246 1105            1110            1115                1120
247 Thr Leu Ala Pro Gly Gly Thr Tyr Ser Ser Ser Gln Asn Cys Gly Cys
248             1125            1130            1135
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VERIFICATION SUMMARY   DATE: 12/06/2001
PATENT APPLICATION: US/09/834,792   TIME: 15:11:33

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